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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,421	03/26/2004	Fusao Ishiguchi	04536.034001	2620

22511 7590 06/26/2007
OSHA LIANG L.L.P.
1221 MCKINNEY STREET
SUITE 2800
HOUSTON, TX 77010

EXAMINER

HAILU, TESHOME

ART UNIT	PAPER NUMBER
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2109

MAIL DATE	DELIVERY MODE
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06/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/811,421	Applicant(s) ISHIGUCHI, FUSAO	
	Examiner Teshome Hailu	Art Unit 2109	

**– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>02/22/2006 and 03/26/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2109

DETAILED ACTION

1. Claims 1-8 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Ono et al (Ono), US 6,868,404.

As per claim 1, Ono discloses:

- Equipment for a **digital video disc**, (Column 26, line 19-23, "The computer-readable storage mediums mentioned here may be removable storage mediums such as floppy disks, CDs, MOs, (Magneto-Optical disks), **DVDs**, and memory cards, or fixed storage mediums such as hard disks and semiconductor memories.")

- **a memory in which key data** associated with information on a digital video disc is recorded in advance; (column 2, line 66-67, "the digital data intelligent memory device may further include **a key information storing unit for storing the key information.**")

- means for **processing the information on said digital video disc using said key data read** from said memory; (column 22, line 44-48, "The data converting unit 109 in the

Art Unit: 2109

management information processing unit 104 in the recorder 100 performs a predetermined data conversion on the encrypted management information using the session key "SK1" generated by the session key establishing unit 102.")

- Wherein **random data is written around said key data in said memory.** (Column 16, line 26-30, "To **write digital content from a recorder onto a memory card**, first the memory card sends its card ID to the recorder, and then a common key is established between the recorder and the memory card"). Moreover, Ono discloses (column 25, line 45-47, "**a random number may be added to a specific position in the encrypted management information prior to the data conversion**").

As per claim 2, Ono discloses:

- said **key data is an encryption key for equipment for encrypting and recording the information on said digital video disc.** (Column 16, line 30-33, "the **recorder encrypts management information containing restrictive information and a content key using the received card ID as an encryption key**").

As per claim 3, Ono discloses:

- said **key data is a decryption key for equipment for decrypting the information read from said digital video disc.** (Column 4, line 33-36, "wherein the **inverse data converting unit decrypts the converted management information using the key information** according to the common key cipher, to restore the management information.")

As per claim 4, Ono discloses:

- said **key data is a decryption key for equipment for decrypting the information read from said digital video disc.** (Column 4, line 33-36, "wherein the **inverse data converting unit decrypts the converted management information using the key information** according to the common key cipher, to restore the management information.")

Art Unit: 2109

As per claim 5, Ono discloses:

- A method of recording in advance prescribed **information to be protected against unauthorized access in a memory**, (column 1, line 47-50, "By *encrypting this restrictive information using the card ID and storing it onto the memory card in the same way as the digital content, the restrictive information can be protected from unauthorized copying* as with the digital content.")

- **writing said prescribed information in an unused area of said memory**; (column 25, line 51-54, "for generation of a session key, a chained cipher may be used whereby *a new session key is generated based on a session key used and stored in an immediately preceding session*"). According to the invention the prescribed information is key information.

- writing random data in an area within said unused area adjacent to said prescribed information written in said step of writing. (column 25, line 51-54, "for generation of a session key, a chained cipher may be used whereby *a new session key is generated based on a session key used and stored in an immediately preceding session*"). Further, (column 25, line 54-58, "*To generate the new session key from the stored session key*, an operation such as *increment*, decrement, one or a combination of the four rule of arithmetic using a predetermined value, or a predetermined secret one-way conversion may be applied *to the stored session key*"). Where generating a new session using increment means generating an adjacent session.

As per claim 6, Ono discloses:

- said **memory is mounted on equipment for a digital video disc**, (column 18, line 60-67, "*The memory card 120 is roughly made up* of a card ID holding unit 121, a card ID sending unit 122, the session establishing unit 123, a first management information processing unit 124, an *encrypted management information storing unit 125*, a second management information

Art Unit: 2109

processing unit 126, an encrypted content receiving unit 127, an encrypted content storing unit 128, and an encrypted content sending unit 129.”)

- said **prescribed information is key data associated with information on a digital video disc**. (Column 2, line 30-34, “**the key information** being also acquired by the digital data utilizing device, wherein the data converting unit encrypts the management information using the **key information according to the common** key cipher, to generate the converted management information.”)

As per claim 7, Ono discloses:

- said **prescribed information is a password**. (Column 24, line 57-60, “according to the predetermined algorithm using the **card ID “CID” as a decryption key**, and so generates the management information “Lic” (s45).

As per claim 8, Ono discloses:

- An apparatus for recording in advance **prescribed information to be protected against unauthorized access in a memory**, (column 1, line 47-50, “By **encrypting this restrictive information using the card ID and storing it onto the memory card in the same way as the digital content, the restrictive information can be protected from unauthorized copying** as with the digital content.”)

- means for writing said prescribed information in an unused area of said memory; ; (column 25, line 51-54, “for generation of a session key, a chained cipher may be used whereby **a new session key is generated based on a session key used and stored in an immediately preceding session**”). According to the invention the prescribed information is key information. Ono teaches, “new session key is generated”, inherently including means for writing.

Art Unit: 2109

- means for writing random data in an area within said unused area adjacent to said prescribed information written in said step of writing. (column 25, line 51-54, "for generation of a session key, a chained cipher may be used whereby **a new session key is generated based on a session key used and stored in an immediately preceding session**"). Further, (column 25, line 54-58, "**To generate the new session key from the stored session key**, an operation such as **increment**, decrement, one or a combination of the four rule of arithmetic using a predetermined value, or a predetermined secret one-way conversion may be applied **to the stored session key**"). Where generating a new session using increment means generating an adjacent session. According to Ono, "random number may be added", inherently including means for writing random data.

Conclusion

4. The prior art made or record and not relied upon is considered pertinent to applicant's disclosure.

TITLE: Optical disc copy management system, US 6,535,858.

TITLE: System for copy protection of recorded information, US 6,580,682.

TITLE: Data processing device, Data storage device, Data processing method, and Program providing medium for storing content protected under high security management, US 6,834,333.

TITLE: Public key certificate revocation list generation apparatus, Revocation judgement apparatus, and Authentication system, US Pub. Number 2003/0217265.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Teshome Hailu whose telephone number is (571) 270-3159. The examiner can normally be reached on Mon-Fri 7:30a.m. to 5:00p.m. PST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chamili Das can be reached on (571) 272-3696. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2109

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Teshome Hailu

TH

Patent Examiner

Art unit 2109

Chameli Das

**CHAMELI DAS
SUPERVISORY PATENT EXAMINER**

6/22/07